

BookletChartTM

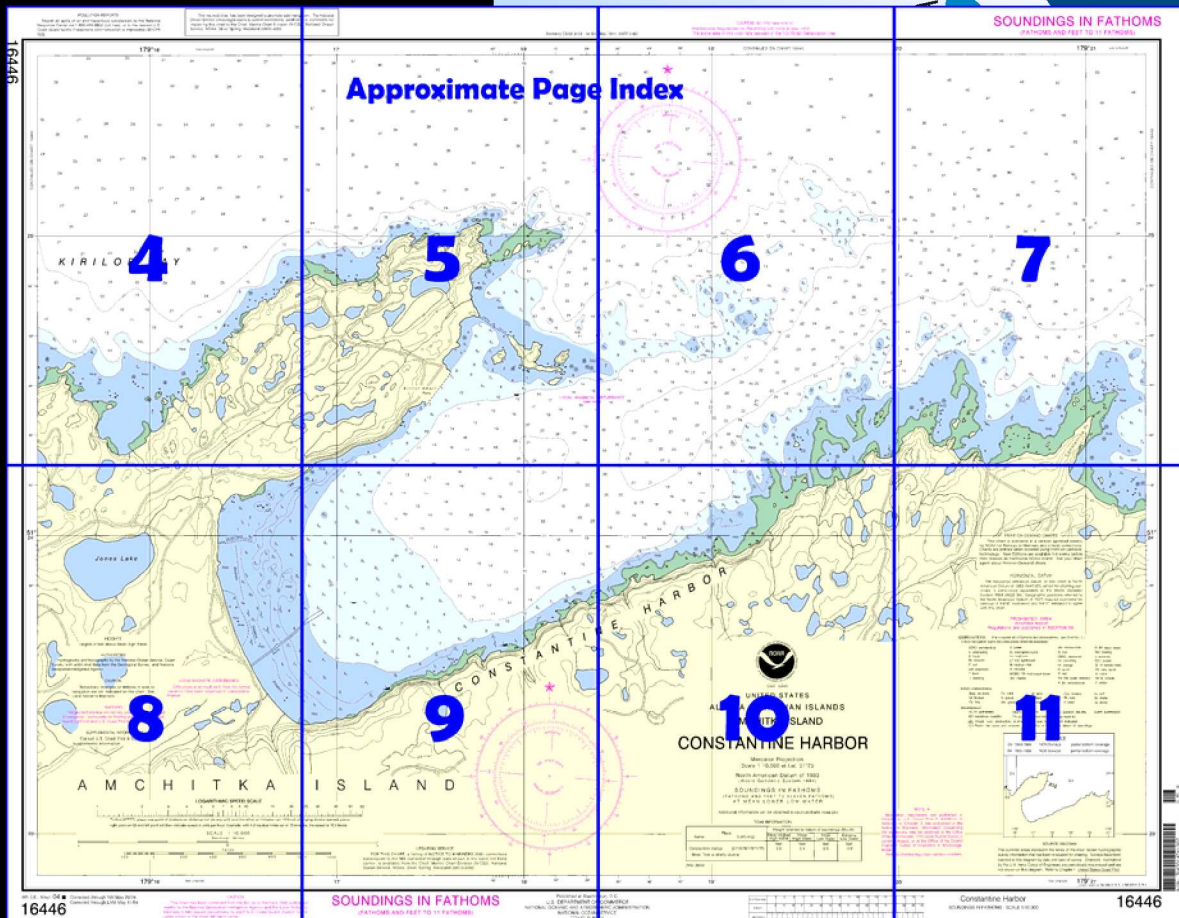
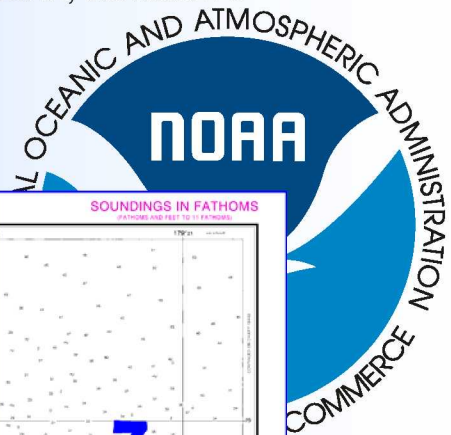
Constantine Harbor

(NOAA Chart 16446)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

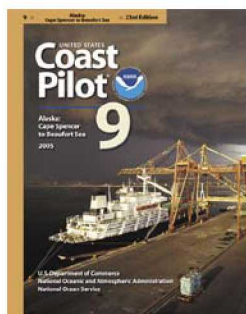
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 9, Chapter 7 excerpts]

(1065) **Constantine Harbor**, on the N side of Amchitka Island 6 miles W of East Cape, provides a fair anchorage. Because there are no prominent features on the island, caution is necessary to avoid mistaking other indentations for Constantine Harbor.

(1066) The S side of Constantine Harbor entrance is foul for 0.5 mile offshore. On the N side a reef, covered less than 2 fathoms in places and marked by heavy kelp, extends almost 1.5 miles E of **Kirilof Point**. The head

of the harbor is a sand beach; other shores are rocky bluffs.

(1067) Currents in the entrance to Constantine Harbor are strong and set across the narrow entrance channel. N to NE gales may force vessels anchored in the harbor out to sea. The harbor is reported free of williwaws.

Local magnetic disturbance

(1068) Differences of as much as 5° from the normal variation have been observed in Constantine Harbor.

(1069) The 0.2-mile-wide channel between the reefs at the entrance can be made on course **235°**; depths are 20 to 30 fathoms. Once inside anchorage is available in 6 to 20 fathoms, fair holding ground in sand and shell bottom.

Table of Selected Chart Notes

Corrected through NM May 29/04
Corrected through LNM May 11/04

HEIGHTS
Heights in feet above Mean High Water.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.
Refer to charted regulation section numbers.

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 5° from the normal variation have been observed in Constantine Harbor.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 9 for important supplemental information.

PROHIBITED AREA
Amchitka Island
Regulations are published in 50CFR36.39.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected on average of 5.678" southward and 9.617" westward to agree with this chart.

PRINT-ON-DEMAND CHARTS
This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

Mercator Projection
Scale 1:10,000 at Lat. 51°25'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Geological Survey, and National Geospatial-Intelligence Agency.

Additional information can be obtained at nauticalcharts.noaa.gov.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

UPDATING SERVICE
FOR THIS CHART, a listing of NOTICE TO MARINERS (NM) corrections subsequent to the NM corrected through date shown in the lower left hand corner, is available from the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

COLREGS, 80.1705 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)			
Aids to Navigation (lights are white unless otherwise indicated):			
AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow
Bottom characteristics:			
Bds boulders	Co coral	gy gray	Oys oysters
bk broken	G gravel	h hard	Rk rock
Cy clay	Grs grass	M mud	S sand
			so soft
			Sh shells
			sy sticky
Miscellaneous:			
AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
(2) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

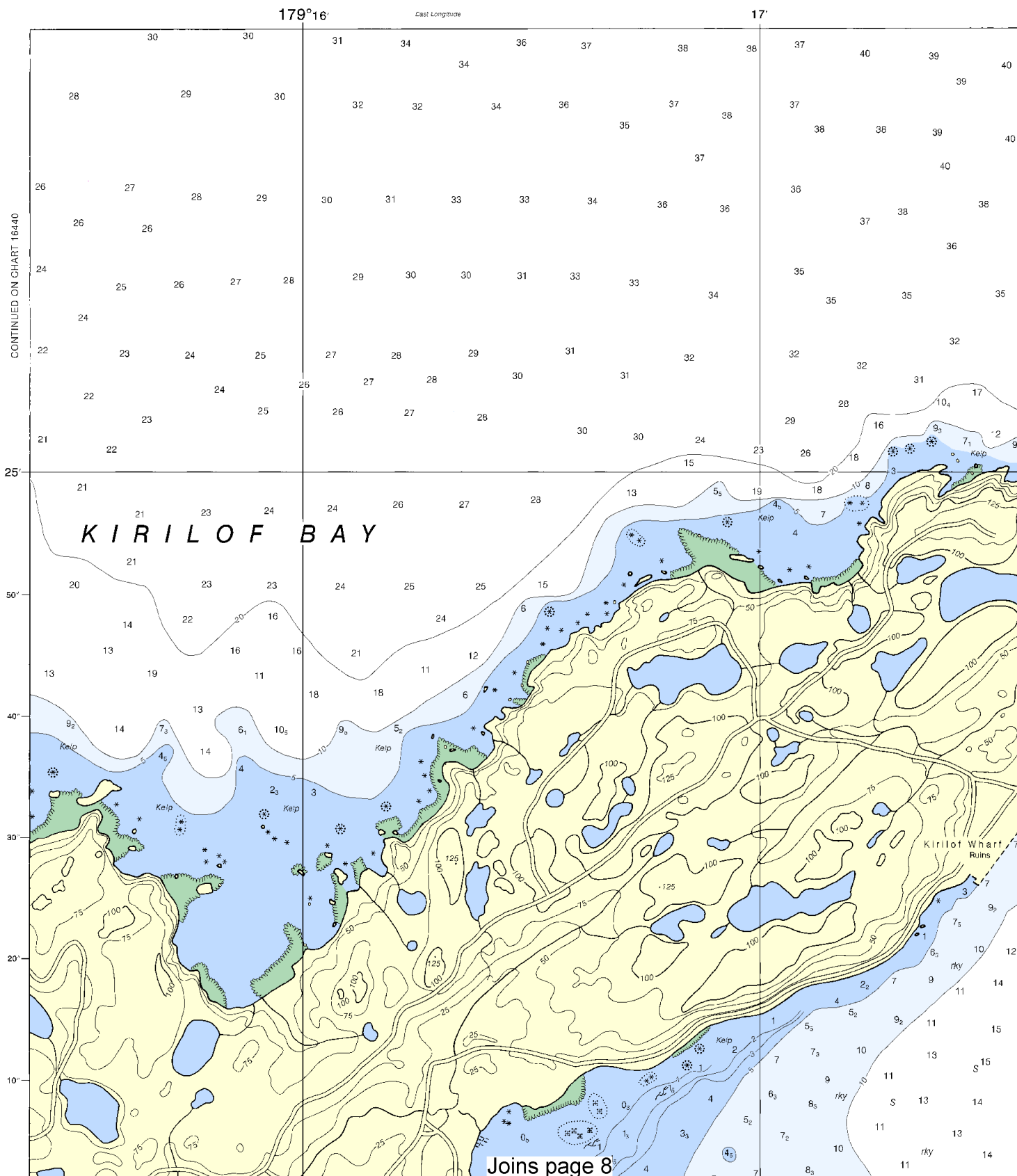
TIDAL INFORMATION					
Name	Place (Lat/Long)	Height referred to datum of soundings (MLLW)			
		Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Constantine Harbor	(51°25'N/179°17'E)	feet 2.8	feet 2.4	feet 0.9	feet -3.0
Note: Tide is chiefly diurnal					
(Mar 2004)					

16446

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153)

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.



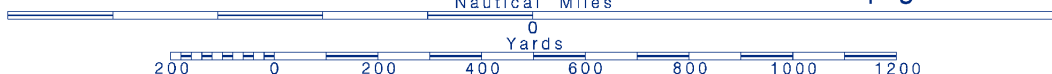
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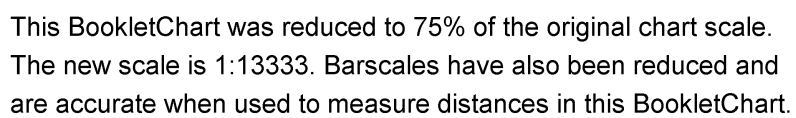


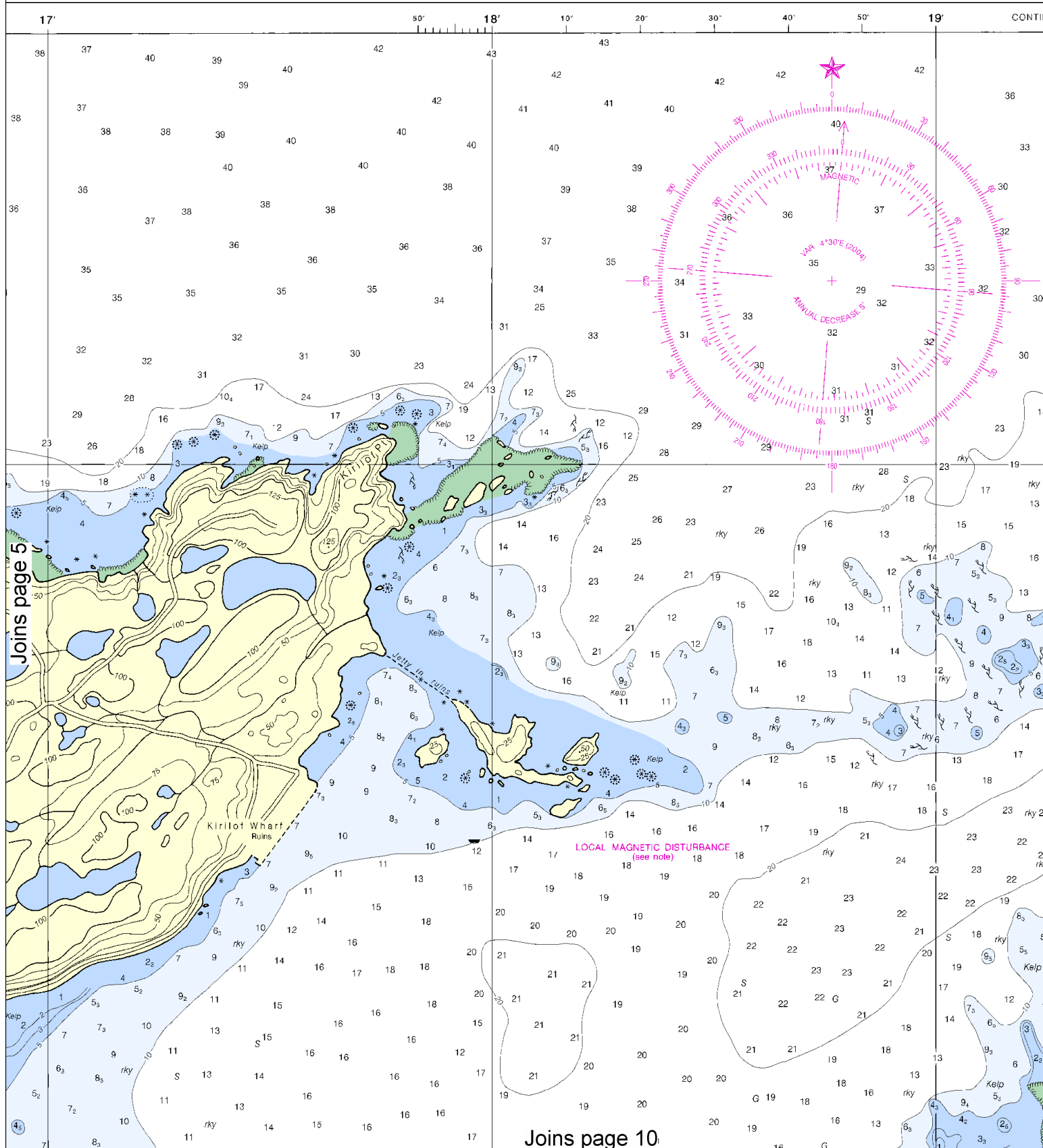
Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.







Printed at reduced scale.

~~SCALE 1:10,000~~
Nautical Miles

See Note on page 5.

Nautical Miles

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Yards

5, 80 1705 (see note A)
 venting Collisions at Sea, 1972.
 seaward of the COLREGS Demarcation Line.

SOUNDINGS IN FATHOMS

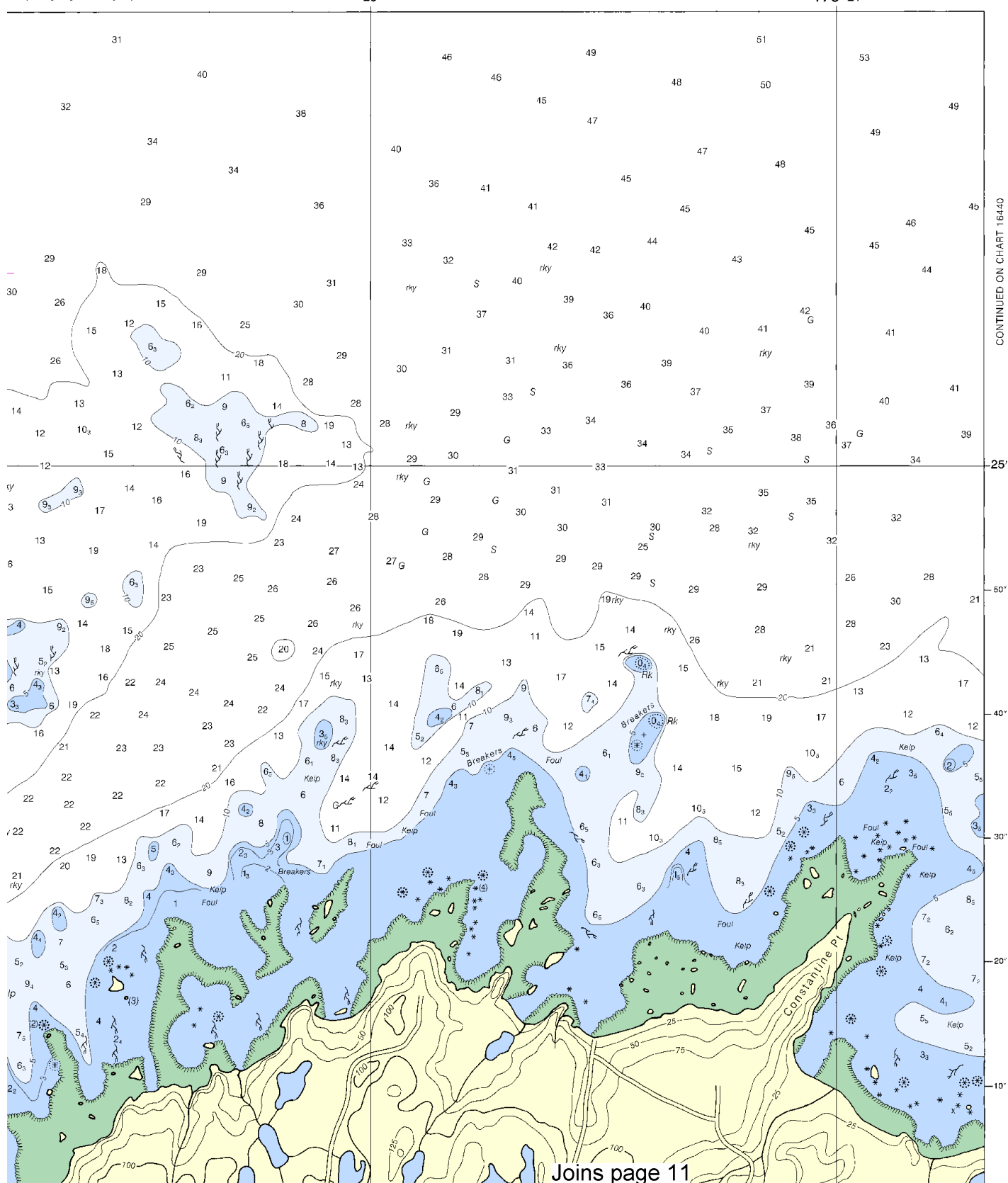
(FATHOMS AND FEET TO 11 FATHOMS)

CONTINUED ON CHART 16440

20'

179° 21'

East Longitude



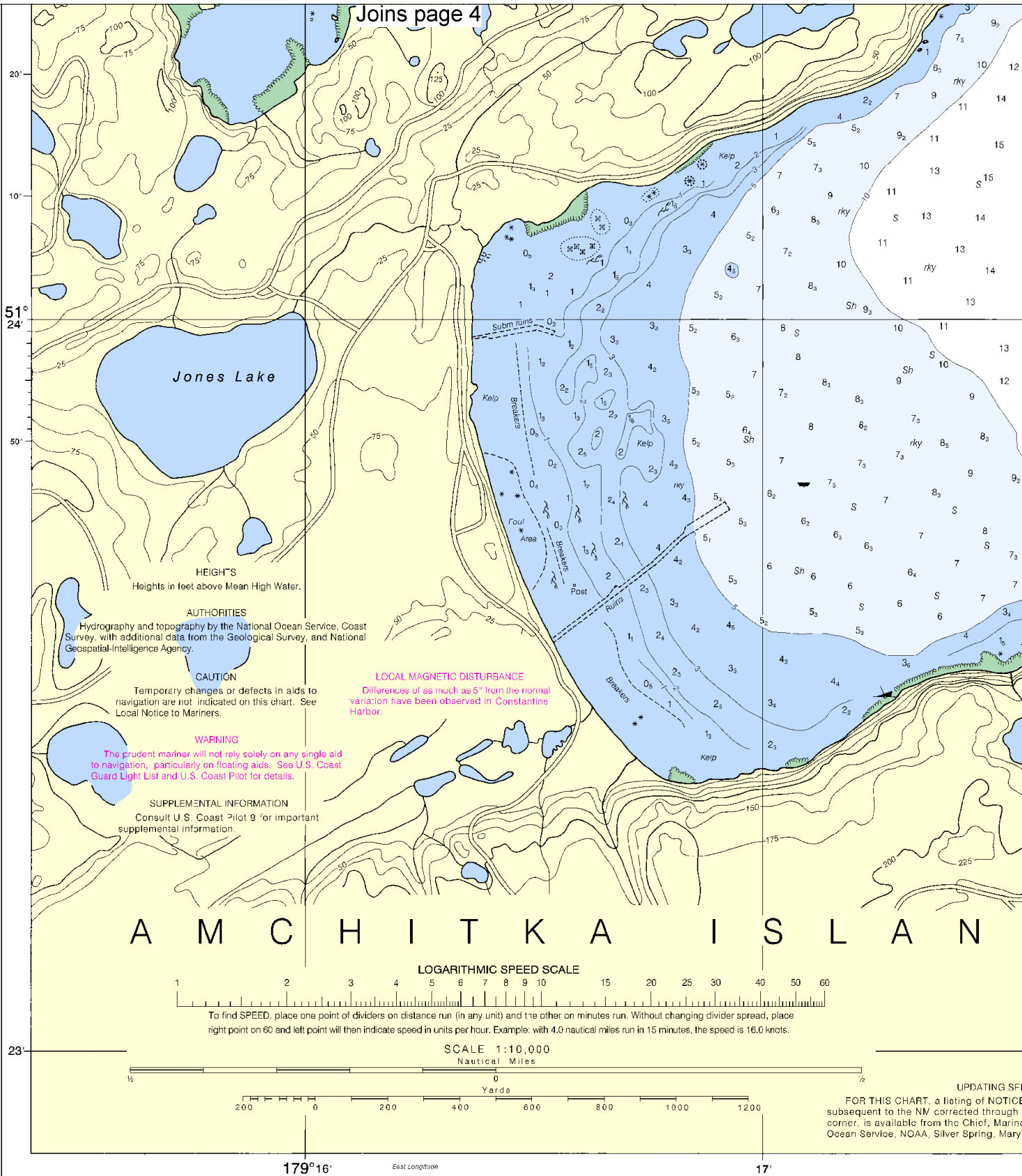
CONTINUED ON CHART 16440

Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
 NGA Weekly Notice to Mariners: 0910 2/27/2010,
 Canadian Coast Guard Notice to Mariners: 0909 9/25/2009.

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Joins page 4



8th Ed., May/04 ■ Corrected through NM May 29/04
Corrected through LNM May 11/04

16446

CAUTION

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SOUNDINGS IN FATHOMS AND FEET TO 11 FATHOMS

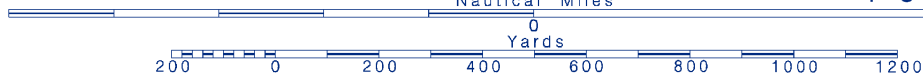
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Printed at reduced scale.

SCALE 1:10,000
Nautical Miles

See Note on page 5.





UNITED STATES
ALASKA - ALEUTIAN ISLANDS
AMCHITKA ISLAND

CONSTANTINE HARBOR

Mercator Projection
Scale 1:10,000 at Lat. 51°25'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS;
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

Name	Place (Lat/Long)	Height referred to datum of soundings (MLLW)			
		Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Constantine Harbor	(51°25'N/179°17'E)	feet 2.8	feet 2.4	feet 0.9	feet -3.0

Note: Tide is chiefly diurnal

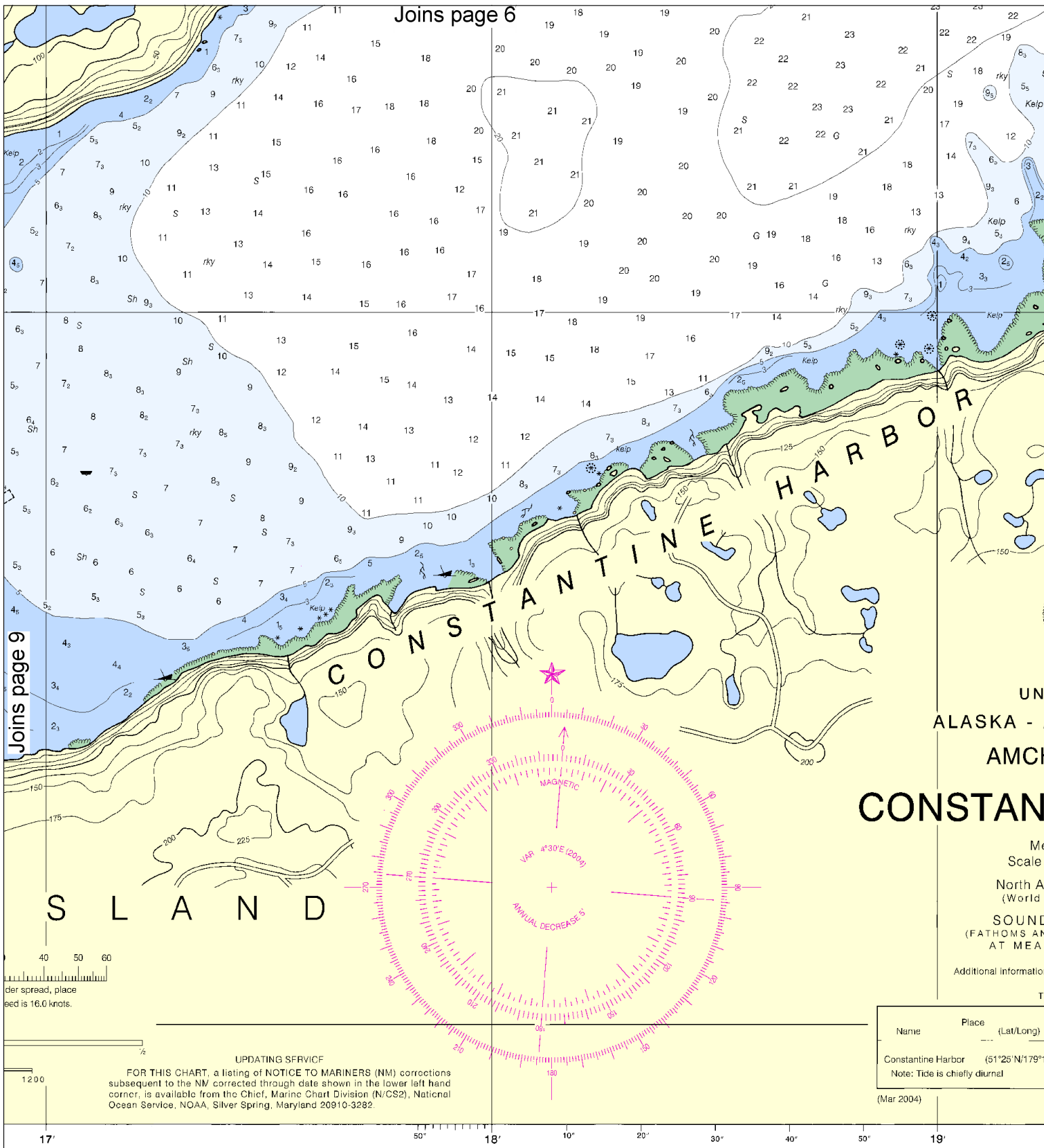
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FATHOMS
FATHOMS)

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12
FEET	6	12	18	24	30	36	42	48	54	60	66	72
METERS	1	2	3	4	5	6	7	8	9	10	11	12



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Additional information
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Name	Place	(Lat/Long)
Constantine Harbor	(51°25' N/179°1	
Note: Tide is chiefly diurnal		

(Mar 2004)

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(FATHOMS AND FEET TO 11 FATHOMS)

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

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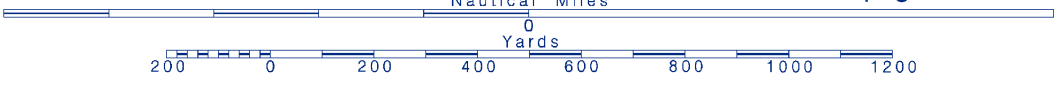
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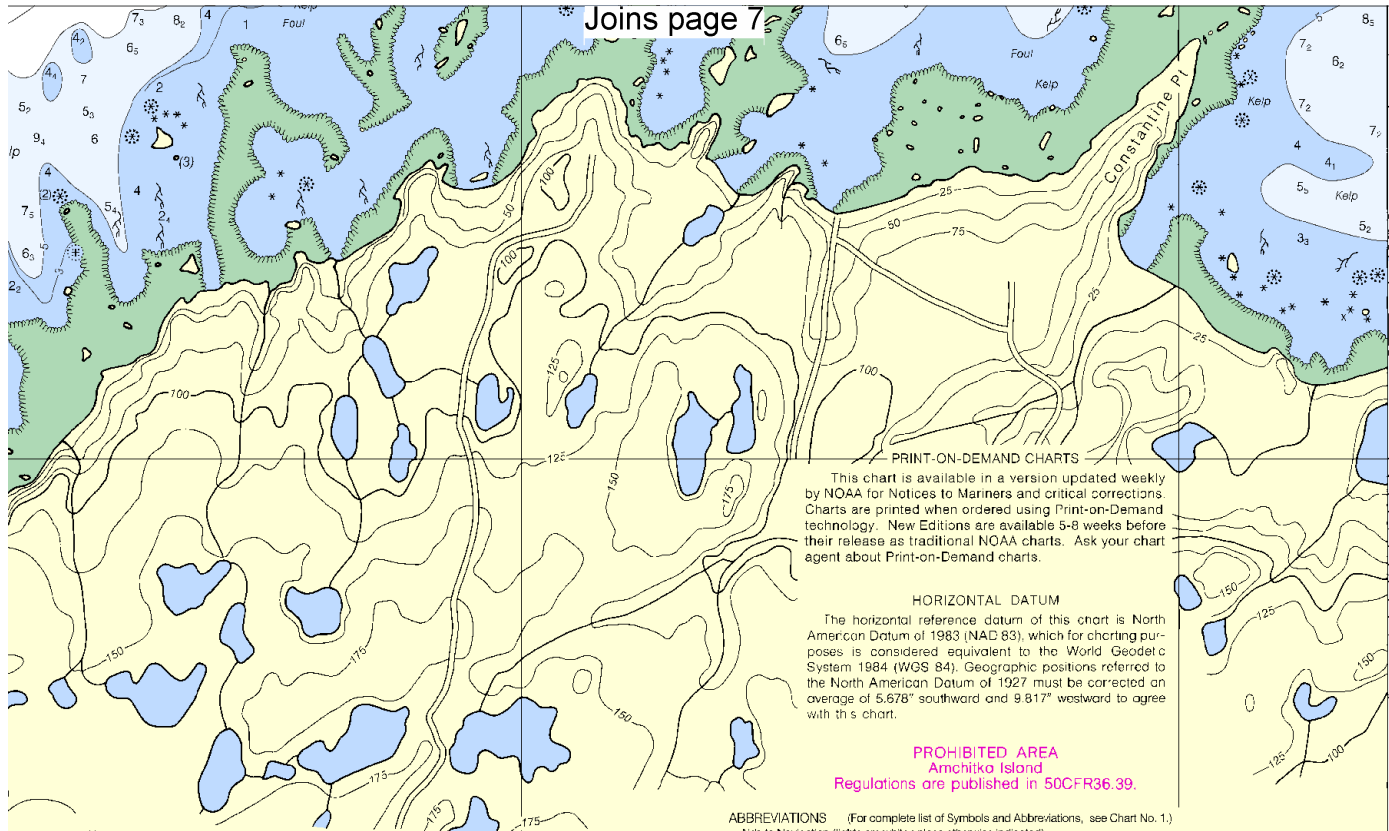


Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





UNITED STATES
ALEUTIAN ISLANDS
CHITKA ISLAND
CONSTANTINE HARBOR

Mercator Projection
Scale 1:10,000 at Lat. 51°25'
American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AND FEET TO ELEVEN FATHOMS;
AND AN FATHOM TO DEEPER

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TIDAL INFORMATION

	Height referred to datum of soundings (MLLW)			
	Mean High Water	Mean Low Water	Mean Low Water	Extreme Low Water
1°17'E	feet 2.8	feet 2.4	feet 0.9	feet -3.0

NOTE A

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PROHIBITED AREA
Amchitka Island
Regulations are published in 50CFR36.39.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
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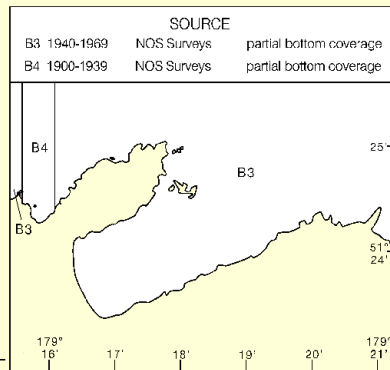
AERO aeronautical	G green	Mo moose code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rat rotating
B black	ISO isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VO very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra RaF radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bds boulders	Co coral	gy gray	Cys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
2L Wrack, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

ATHCM S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Constantine Harbor
SOUNDINGS IN FATHOMS - SCALE 1:10,000

16446

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NSN 7642014011307
NGA REFERENCE NO. 16BHA16446

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (Pacific Coord) – 510-437-3700

Coast Guard Search & Rescue (RCC Juneau) – 907-463-2000

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENC[®]s are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENC[®]s comply with standards of the International Hydrographic Organization. ENC[®]s and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNC[™]s are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNC[™]s comply with standards of the International Hydrographic Organization. RNC[™]s and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.